What is claimed is:

1. A device, comprising an array of light-filtering channels having an input surface from which said light-filtering channels receive input light and an output surface from which said light-filtering channels export output light, wherein each light-filtering channel comprises:

a light-conducting channel formed of a transparent dielectric material having a first surface which is substantially reflective and a second surface opposing said first surface, said first and second surfaces substantially parallel to said light-conducting channel; and

at least two optical filters sequentially formed on said second surface along said light-conducting channel to reflect said input light between said first and second surfaces so that said input light is sequentially reflected and filtered by said optical filters to produce said output light, wherein each optical filter includes at least one metal layer and an electro-optical dielectric layer contacting with each other to form a metal-dielectric interface which generates a surface plasmon wave in response to a p-polarized input light beam to transmit

light at a selected wavelength within a bandwidth according to a control voltage from said metal layer to said dielectric layer and reflects light of other wavelengths; and

at least two thin-film transistors respectively formed on said optical filters to provide said control voltage to control a refractive index of said dielectric layer and thereby said selected wavelength to change a color and a grey scale of said output light.

2. The device as in claim 1, wherein said dielectric layer includes a liquid crystal material.

3. The device as in claim 1, further comprising a screen positioned relative to said output surface to receive said output light from said light-filtering channels to form an image.

4. The device as in claim 1, wherein said input surface is substantially parallel to said output surface, and wherein said input and output surfaces each form an angle with respect to said first and second surfaces in each light-filtering channel.

5. The device as in claim 1, further comprising a polarization element that receives and transmits input light to said input surface.

6. A device, comprising:

a plurality of transparent plates each having a filtering surface and an opposing, reflecting surface,

a metallic layer formed over said filtering surface of each transparent plate;

an electro-optical dielectric layer, whose refractive index changes in response to a control voltage, disposed in contact with said metallic layer to form a metal-dielectric interface which generates a surface plasmon wave in response to a p-polarized input light beam to transmit light through said metallic layer at a selected wavelength within a bandwidth according to a local refractive index of said electro-optical dielectric layer at each location of said metallic layer where light is reflected and to reflect light of other wavelengths back to each transparent plate; and

a plurality of parallel linear arrays of transistors formed over said dielectric layer, wherein said transistors are independent from one another, and where each parallel linear array of transistors defines a light

channel along which light is reflected between said filtering and said reflecting surfaces to modify a color and an intensity of said light according to voltages from said transistors in each linear array relative to a common voltage of said metallic layer,

wherein said transparent plates are stacked over one another so that a reflecting surface of one transparent plate faces a filtering surface of an adjacent transparent plate to form a two-dimensional array of light channels.

7. The device as in claim 6, further comprising a first intermediate metallic layer in contact with said electro-optical material layer and a first electro-optical material layer switched between said first intermediate metallic layer and said plurality of parallel linear arrays of transistors.

8. The device as in claim 6, wherein said transistors are thin-film transistors.

9. The device as in claim 6, wherein each transparent plate is formed of a glass material.

10. The device as in claim 6, wherein said electro-optical dielectric layer includes a liquid crystal material.

11. A device, comprising:

a first tunable optical filter disposed to receive an input light beam to produce a first reflected beam and a first transmitted light beam, wherein said first tunable optical filter responds to a first electrical control signal to transmit light at a first wavelength and reflects light at other wavelengths and said first wavelength changes with said first electrical control signal;

a second tunable optical filter disposed relative to said first tunable optical filter receive said first reflected light beam to produce a second reflected beam and a second transmitted light, wherein said second tunable optical filter responds to a second electrical control signal to transmit light at a second wavelength and reflects light at other wavelengths and said second wavelength changes with said second electrical control signal; and

a third tunable optical filter disposed relative to said second tunable optical filter to receive said

second reflected light beam to produce a third reflected beam and a third transmitted light, wherein said third tunable optical filter responds to a third electrical control signal to transmit light at a third wavelength and reflects light at other wavelengths and said third wavelength changes with said third electrical control signal,

wherein each of said tunable optical filters having at least one electro-optical dielectric layer sandwiched between two metal layers to form a first metal-dielectric interface for receiving an input light beam and a second metal-dielectric interface for generating an output light beam, said two metal-dielectric interfaces configured to couple electromagnetic energy at a selected wavelength from said first metal-dielectric interface surface to said second metal-dielectric interface by coupling of surface plasmon waves in response to a p-polarized input beam according to a respective electrical control signal; and

wherein said first, second, and third electrical control signals are sequentially changed to produce a sequential color scroll in colors of said first, second, and third transmitted light beams.

12. The device as in claim 11, further comprising a spatial light modulator array of a plurality of modulator pixels disposed relative to said first, said second, and said third tunable optical filters to receive and modulate said first, second, and third transmitted light beams to produce a colored image.

13. The device as in claim 11, further comprising a polarization element positioned and configured to control a polarization of said input light beam before it enters said first tunable optical filter.

14. The device as in claim 11, said first, said second, and said third tunable optical filters are positioned relative to each other so that said first, said second, and said third transmitted light beams are parallel.

15. A device, comprising:

a surface plasmon filter having (1) a first metallic layer and a second metallic layer parallel to each other and spaced from each other by a gap, (2) a dielectric material filled between said first and said second metallic layers to support surface plasmon waves at each metal-

dielectric interface in response to a p-polarized input optical beam, and (3) a control mechanism coupled to control an optical path length between said first and said second metallic layers to couple electromagnetic energy at a selected wavelength from said first metallic layer to said second metallic layer, said selected wavelength varying with a control by said control mechanism;

a reflector having a reflective surface to reflect an optical beam that transmits through said surface plasmon filter to produce a reflected beam; and

a liquid crystal display panel placed in a path of said reflected beam to modulate an intensity distribution of said reflected beam to produce an optical image.

16. The device as in claim 15, wherein said reflective surface is diffusive.